

REMARKS

Claims 2-5 and 7-14 are all the claims pending in the application. By this Amendment, Applicant cancels claims 1 and 6. In addition, Applicant rewrites claims 2 and 7 into their independent form including all the recitation of their respective base claims. Also, Applicant amends claims 2, 7, and 11 to further clarify the invention. Moreover, claims 3 and 4 are amended to depend from claim 2, and claims 8 and 9 are amended to depend from claim 7. Finally, in order to provide more varied protection, Applicant adds claims 12-14.

In the Advisory Action dated November 15, 2004, the Examiner alleges that claim 1 broadly suggests conventional MPOA over an ATM network (page 3 of the Advisory Action). In response, Applicant amends claims 2, 7, and 11 to further clarify the invention.

For example, in the background of invention, the source layer 3 address of a data packet is not included in the MPOA address resolution request packet. As a result, the MPOA server cannot determine a shortcut is undesirable. In other words, conventional MPOA techniques are not able to prevent an unauthorized data packet from a subnet X to reach a subnet C.

In the present invention, however, as set forth in now amended claims 2, 7, and 11, “wherein when the source layer 3 address is not included in the MPOA address resolution request packet, establishing a shortcut between MPOA source client and MPOA destination client and when the source layer 3 address is included in the MPOA address resolution request packet, comparing the source layer 3 address with the destination layer 3 address thereby determining whether communication between the MPOA source client and the MPOA destination client is permitted.”

Williams, as acknowledged by the Examiner, explains conventional MPOA over an ATM network (see page 3 of the Advisory Action). That is, William's simply describes the MPOA protocol without any modifications or improvements. On page 3 of the Advisory Action, however, the Examiner appears to confuse an IP frame being forwarded from a client to an edge switch with an MPOA address resolution request packet. In Williams, the following method is performed:

- 1) IP frame with destination and source address of a client is forwarded to an edge switch (page 2/4, ¶¶ 2 and 8).
- 2) The edge switch interprets the received IP frame and extracts the destination IP address (*Id.*; "the function of the MPOA client is embedded in the edge switches" (page 2/4, ¶3).
- 3) The edge switch generates an MPOA address resolution request packet. This MPOA address resolution request packet contains a destination IP address only (page 2/4, ¶ 8, particularly, second through fourth sentences: "The edge switch supporting the client will receive this frame and take a look at **the IP address**," emphasis added to direct Examiner's attention that the edge switch takes a look at **a single** IP address, and that a single IP address is used as an address resolution).
- 4) The edge switch queries the route server (*Id.*).
- 5) The route server resolve a proxy ATM address (*Id.*).
- 6) The edge switch establishes a switched ATM path to that address (*Id.*).

Williams, however, simply maps the IP address to an ATM address but in Williams there is no comparison between the source layer 3 address and the destination layer 3 address to determine if the communication between the MPOA source client and MPOA destination client is permitted.

In addition, in Williams, there is no teaching or suggest of the resolution request packets being different. That is, Williams only teaches generating an address resolution request packet with a single IP address. There is no teaching or suggestion in Williams that “when the source layer 3 address is not included in the MPOA address resolution request packet, establishing a shortcut between MPOA source client and MPOA destination client and when the source layer 3 address is included in the MPOA address resolution request packet, comparing...”

For at least these exemplary reasons, Applicant respectfully submits that claims 2, 7, and 11 are patentably distinguishable from Williams. Claims 3 and 8 are patentable at least by virtue of their dependency on claims 2 and 7, respectively.

Claims 4, 5, 9, and 10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Williams in view of U.S. Patent No. 5,467,349 to Huey et al. (hereinafter “Huey”). Applicant respectfully traverses this rejection with respect to the dependent upon claim 2, claims 4 and 5 and dependent upon claim 7, claims 9 and 10. Applicant has already demonstrated that Williams does not meet all the requirements of independent claims 2 and 7. Huey is relied upon only for its teaching of its error processing and filtering. Huey has nothing to do with MPOA packets. For example, Huey does not disclose “wherein when the source layer 3 address is not included in the MPOA address resolution request packet, establishing a shortcut between MPOA source client and MPOA destination client and when the source layer 3 address is included in the

MPOA address resolution request packet, comparing the source layer 3 address with the destination layer 3 address thereby determining whether communication between the MPOA source client and the MPOA destination client is permitted,” as recited in claims 2 and 7.

Clearly, Huey does not compensate for the above-identified deficiencies of Williams. Together, the combined teachings of these references would not have (and could not have) led the artisan of ordinary skill to have achieved the subject matter of claims 2 and 7. Since claims 4-5 and 9-10 dependent upon claims 2 and 7, respectively, they may be patentable at least by virtue of their dependency.

Similarly, new claims 12-14 are patentable at least by virtue of their dependency on claim 2.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

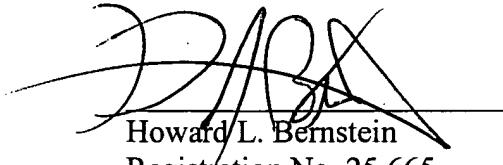
The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Amendment under 37 C.F.R. § 1.114
U.S. Application No.: 09/512,088

Attorney Docket No.: Q57985

Entry and consideration of this Amendment is respectfully requested.

Respectfully submitted,



Howard L. Bernstein
Registration No. 25,665

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: December 2, 2004